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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,387

06/30/2003

Haruhiro Yuki

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7590

05/03/2006

WENDEROTH, LIND & PONACK, L.L.P.

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SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

ROY, SIKHA

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,387

Applicant(s)

YUKI ET AL.

Examiner

Sikha Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-28 is/are allowed.
- 6) ☒ Claim(s) 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 8, 2006 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,483,491 to Lee, and JP 2001-006562 to Kasahara et al. and further in view of U.S. Patent 6,525,470 to Amemiya.

Regarding claim 14 Lee discloses (Fig. 6 column 4 lines 26-50) a plasma display panel comprising plurality of cells, a first substrate 100, a display electrode comprising plural parallel-disposed electrodes 111, 111' on the first substrate so as to form

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discharge gap between two of the plural parallel-disposed electrodes for emitting light, a dielectric layer 120 covering the first substrate and the display electrodes, a plurality of float (auxiliary) electrodes 130 disposed in the cells on the dielectric layer so that the float electrodes are insulated from the display electrode in each cell and the float electrode in each cell being separated from the float electrode in other cell (cell being considered to be discharge space in between two adjacent display electrodes and the address electrode), a protective layer 140 covering the dielectric layer 120, the float electrodes and a second substrate 200 wherein the display electrodes on the first substrate face the second substrate and a plurality of data electrodes 210, 210' disposed on the second substrate and oriented to cross the parallel-disposed display electrode.

Lee does not exemplify the float electrodes being transparent.

Kasahara in same filed of endeavor discloses (Fig. 1 abstract) transparent float electrodes 17 formed in the discharge gap in the middle area of two display electrodes on the front substrate. It is noted the float electrodes being transparent, light emits through the float electrodes and thus improves efficiency.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include transparent float electrodes as taught by Kasahara et al. for the float electrodes of Lee for improving light emitting efficiency.

Referring to claim 14 Lee and Kasahara are silent about the dielectric layer is not covering a part of the discharge gap in each cell and having float electrode disposed there.

Amemiya in analogous field of plasma display discloses (Figs. 2,3 column 2 lines 43-67) a plasma display panel comprising a first substrate 11, a plurality of parallel display electrodes X,Y so as to form a discharge gap in between, a dielectric layer 14 covering the first substrate, display electrodes and not covering at least a part 21 of the discharge gap G and a protective layer 15 covering the dielectric layer 14 and the discharge gap G. Amemiya further discloses when starting voltage is applied the strength of the electric field is high in the discharge gap G not covered by dielectric layer and thus it is possible to reduce the starting voltage and increase the reliability of the display.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include a part not covered by the dielectric layer and the float electrodes outside the dielectric layer are disposed in the gap not covered by the dielectric layer of plasma display of Lee and Kasahara as taught by Amemiya for reducing the starting voltage and increasing the reliability of the display.

Regarding claim 16 Lee discloses (Fig. 6) the shape of the float electrode is rectangular.

Regarding claim 15,17 and 18, Lee, Kasahara and Amemiya disclose the claimed invention except for the limitation of shape of the float electrode being H shaped for claim 15 (variation of H-shape for claim 17 and variation of rectangle for claim 18). It has been held that a change in shape is generally recognized as being within the level of ordinary skill in the art. It would have been obvious to one having ordinary skill in the art to select the shape of the float electrode in H-shape or variation

of H or rectangular shape, since such a modification would have involved a mere change in the shape of a component.

Allowable Subject Matter

Claims 19-28 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Regarding claim 19, the references of the Prior Art of record fails to teach or suggest a plasma display panel having the combination of the limitations as set forth in claim 19, and specifically comprising the limitation of resistance of the transparent float electrode is higher in area of the float electrode that are closer to the parallel-disposed display electrodes.

Regarding claims 20-23, claims 20-23 are allowable for the reasons given in claim 19 because of their dependency status from claim 19.

Regarding claim 24 the references of the Prior Art of record fails to teach or suggest a plasma display panel having the combination of the limitations as set forth in claim 24, and specifically comprising the limitation of resistance of the transparent float electrode being 10-100M Ω .

Claims 25-28 are allowable for the reasons given in claim 24 because of their dependency status from claim 24.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sikha Roy

Sikha Roy
Patent Examiner
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